



POINT OF VIEW

Racing ahead with artificial intelligence

Today's AI doesn't just shuttle passengers and cargo. It wins races.



In 2014, ABB FIA Formula E became the world's first fully electric international single-seater racing championship. It was as groundbreaking for the world of motorsport as the inception of car-to-pit telemetry in the 1980s.

Four seasons later, Formula E returns to the streets of a variety of destinations from Hong Kong and Switzerland to the United States with a raft of changes. There's a new car. A new team. And a record-high number of drivers starting each race.

But the most disruptive participant this season isn't wearing a helmet or sporting aerodynamic fins. It's in the Envision Virgin Racing garage. Because Envision Virgin Racing, with professional services firm Genpact, is working to embed artificial intelligence into the team to turn data into insight and transform its decision making at speed.

Speedy data science

Formula E races on the bleeding edge of automotive technology. So, it's no surprise that teams are inundated with data on everything from pre-race track conditions to detailed telemetry from sensors monitoring every major component and system in the car.

Envision Virgin Racing is using Genpact Cora, an AI platform that accelerates digital transformation, to cleanse, structure, and harness these deep and complex pools of data. The technology then identifies patterns, builds predictions, and makes recommendations about energy management, speed, or passing strategies using all available data — and does all of this faster than the team can, enhancing the work of the strategists and engineers.

This means pre-race strategy simulations are both more comprehensive and accurate. When race conditions change, drivers and their team strategists need to know which of the next-best actions to take. With improved simulations, the team can make better decisions under the highest pressure imaginable, creating predictive insights that drive competitive advantage.

Data engineering tackles the rules

As a relatively new championship that embraces tomorrow's technology today, Formula E is pushing electric vehicle technology, innovation, and fan engagement beyond convention. Annual changes to the sport's regulatory framework apply as much to engineering as they do to ensuring the sport thrives as compelling entertainment.

Since last season, the championship did away with mandatory pit stops. It changed from a fixed number of laps to a race of 45 minutes plus one extra lap. And it added a higher-power attack mode to give drivers more opportunities to overtake rivals. That's exciting for fans but challenging for teams.

When the regulations change, drivers and engineers have to invest in understanding their impact. We're helping Envision Virgin Racing by applying our optimization expertise and data engineering to the Formula E rulebook.

By converting the championship sporting regulations to structured data and annotating with timing data, voice, video, and text explanations of the rules, the team can instinctively apply the rules among thousands of other variables to all its decisions and secure stronger race-day performances.

(Machine) learning to be popular

Formula E limits how much power a driver can consume at any time. It's part safety measure, part battery preservation, and part competitive balance. But the championship also offers Fanboost, a social media vote that gives the most popular drivers a short burst of power above the normal guidelines. It's a huge advantage and one Envision Virgin Racing wants its drivers to have more often.

To secure that potentially race-defining advantage, we're using customer journey-mapping to help Envision Virgin Racing get closer to its fans, building detailed personas to find high-propensity voters, and identifying new ways to convert them into regular Fanboost supporters. And with enhanced strategic planning, it can determine the optimal conditions to use the boost. This is where fan engagement translates directly into extra power and winning results.

Becoming an instinctive racing team

Envision Virgin Racing put Genpact on the team to help become a more consistent winner. By embedding AI into the team's neural wiring we're connecting people, processes, and knowledge so the team can adapt to each scenario instinctively. This allows them to make accurate, proactive decisions that enhance performance and delight fans. This is how Envision Virgin Racing is becoming the first instinctive racing team.

Our work together enables Envision Virgin Racing to act as a more connected ecosystem, capturing and sharing data, and improving how the team, its fans, and partners collaborate. With enhanced track-data quality we're uncovering the predictive insights that sharpen strategy and race-day decisions. And as the team spends less time

managing data and more time on value-added tasks, it becomes more adaptive, with each person focused on where they can make the biggest difference, all in service to their common purpose: winning races.

Careful with the champagne

Even businesses with less exotic callings than a Formula E podium position can take advantage of AI. The same deep dive that Genpact Cora takes into the Formula E rulebook can be done for banks who need to understand

all the nuances of their cash reserves to stay in regulatory compliance. Consumer packaged goods companies can crunch the numbers on macroeconomic trends and weather patterns to find the right mix of stock levels and offers for the month or even weekend ahead. Those are trophy-worthy wins in their respective fields.

AI doesn't wear a jumpsuit or a necktie and may react badly to being showered with champagne. But in every other way that matters, AI is a critical part of a high-performing team, helping next-generation organizations like Envision Virgin Racing compete and win.

This point of view was authored by Armen Kherlopian, Chief Science Officer, Genpact, and first published in MIT Technology Review.

About Genpact

Genpact (NYSE: G) is a global professional services firm that makes business transformation real. We drive digital-led innovation and digitally-enabled intelligent operations for our clients, guided by our experience running thousands of processes primarily for Global Fortune 500 companies. We think with design, dream in digital, and solve problems with data and analytics. Combining our expertise in end-to-end operations and our AI-based platform, Genpact Cora, we focus on the details - all 87,000+ of us. From New York to New Delhi and more than 25 countries in between, we connect every dot, reimagine every process, and reinvent companies' ways of working. We know that reimagining each step from start to finish creates better business outcomes. Whatever it is, we'll be there with you - accelerating digital transformation to create bold, lasting results - because transformation happens here.

For additional information <https://www.genpact.com/get-in-touch>

Get to know us at [Genpact.com](https://www.genpact.com) and on [LinkedIn](#), [Twitter](#), [YouTube](#), and [Facebook](#).

**Transformation
Happens Here**

